The medium will therefore exhibit the mode of mounting from twenty to thirty feet at one time, which are heights that can be obtained in any country, and probably one or two may riſe, ſufficient to extend a pond to ſuch ſituation as will produce a plane of one or two hundred feet perpendicular.

In forming this I will ſuppoſe a riſe of twenty feet, where a ſingle plane, on an angle of about twenty degrees, is to be extended from one pond to the other; alſo ſixty feet of ſuch plane paſſing into each canal, turned hollow on entering the lower pond, and bridged on turning into the upper level. On the top and near the centre of the bridge a ſtrong framing is to be conſtructed, croſſing the plane, in which a roller is placed ſimilar to that under the vertical wheel in the laſt machine, and for the ſame purpoſe; two pulleys are alſo fixed to the frame in order to guide the leading chains over the centre of the plain.

A water-wheel muſt then be erected near the ſide of the plain to create the neceſſary power *(ſee the Ground Plan)*, on the ſhaft of which a pinion working in a wheel will put a roller or drum in motion, on which the leading chains are to lap, which roller may be caſt in and out of gear by a lever; three hundred and fifty feet of chain muſt then be fixed to the roller, and paſs through the pulleys over the plane.

I will now ſuppoſe ten or any leſs number of boats ready to deſcend at one operation; the leading chain, making a double under the roller, is hooked to the ſtern of the third boat; and the wheel being put in motion it will draw the three firſt boats over the bridge of the plane, the other ſeven following: the three boats being now on the ſharp angle will have power ſufficient to draw

out

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